ET240104772US

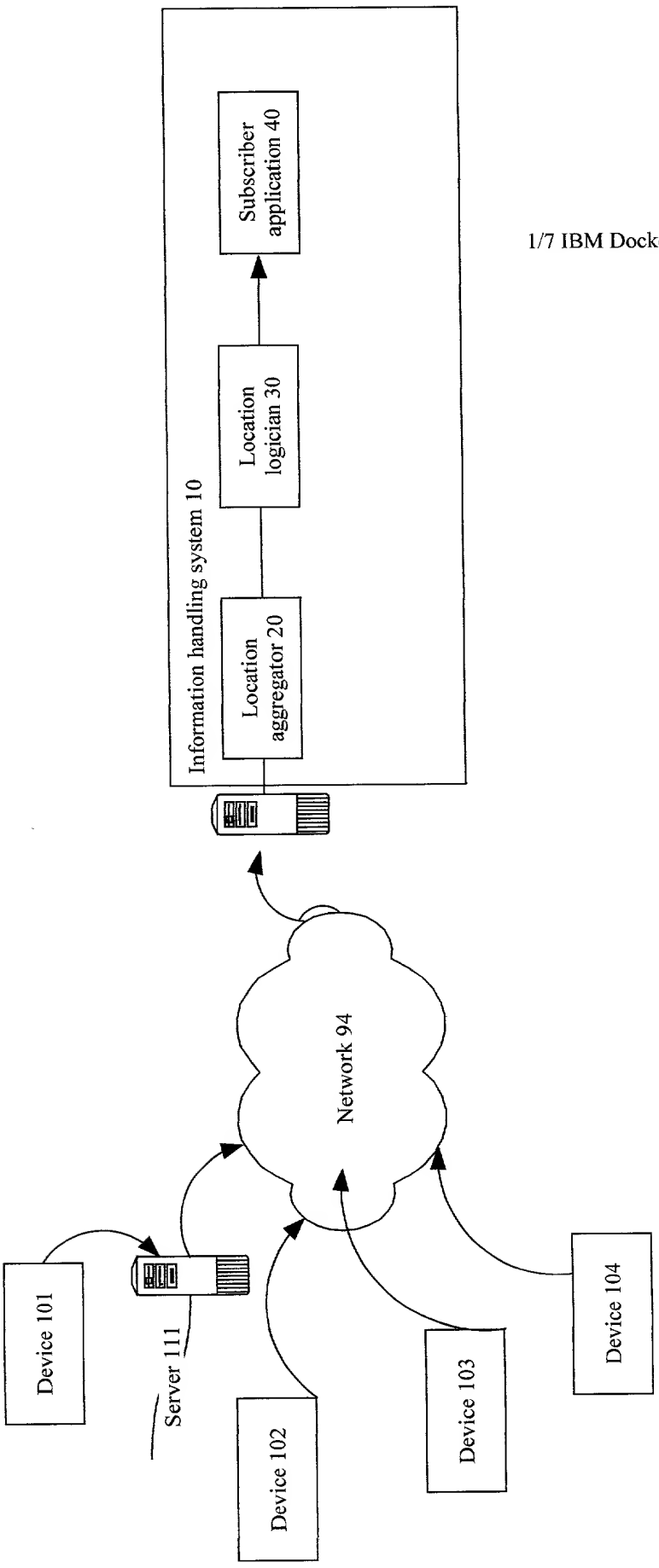

FIG. 1

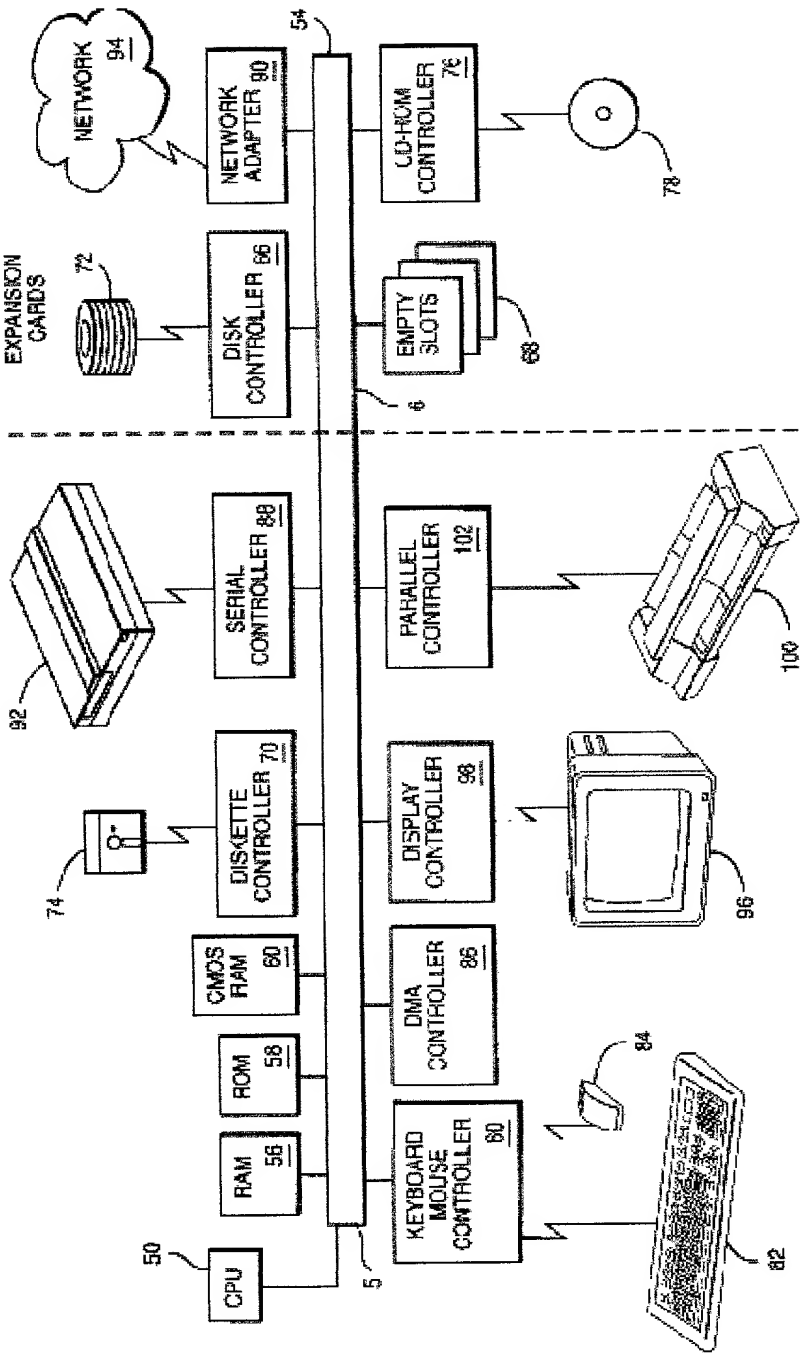
NETWORK
94
NETWORK ADAPTER 90
54
CD-ROM CONTROLLER 76
78
EXPANSION CARDS
72
DISK CONTROLLER 86
EMPTY SLOTS
88
6
92
SERIAL CONTROLLER 88
PARALLEL CONTROLLER 102
100
74
DISKETTE CONTROLLER 70
DISPLAY CONTROLLER 98
96
CMOS RAM 60
DMA CONTROLLER 96
ROM 58
RAM 56
KEYBOARD MOUSE CONTROLLER 80
84
CPU
50
5
82

FIG. 2

FIG. 3

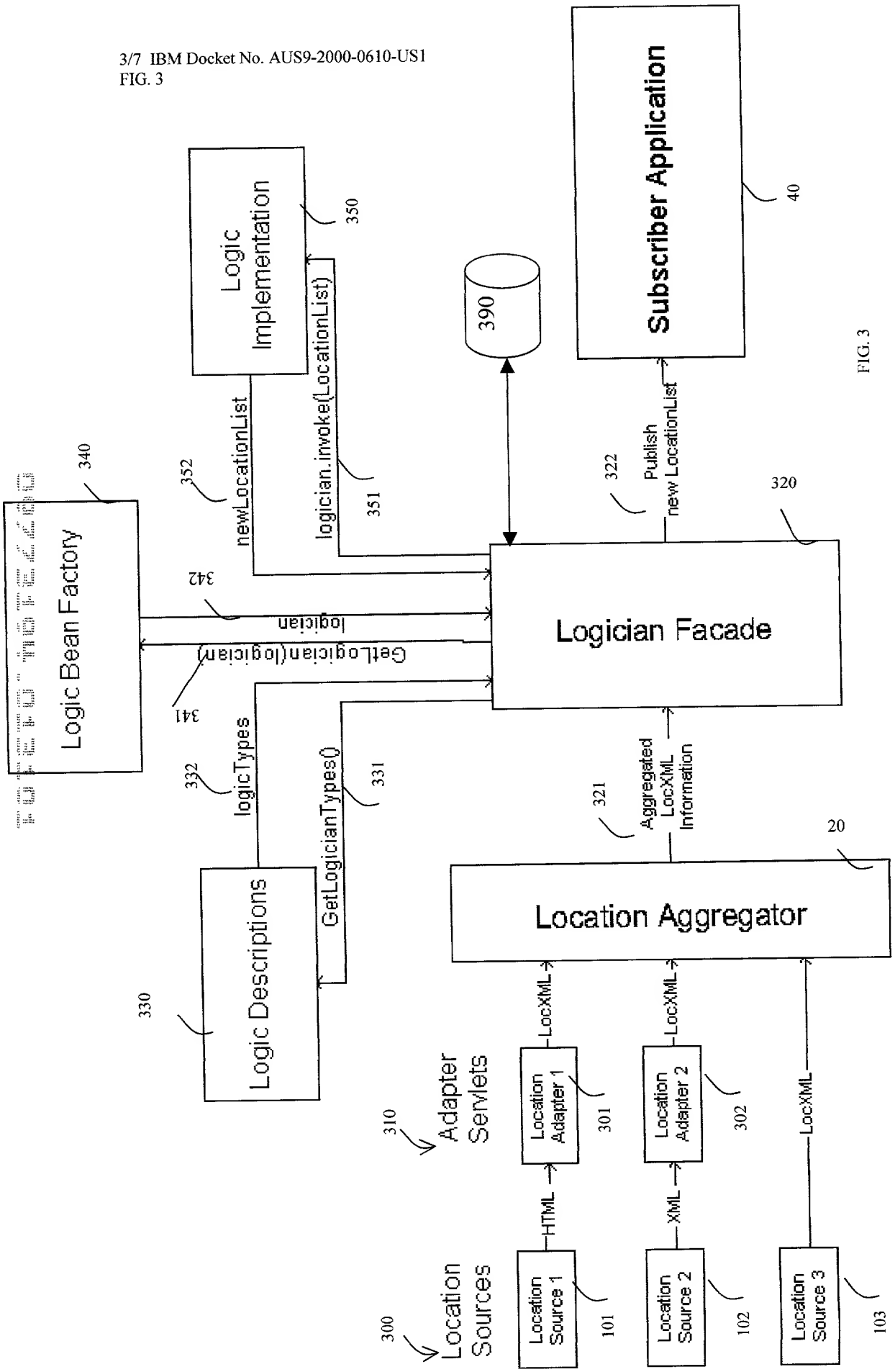
Subscriber Application
40
Logic Implementation
350
390
Logic Bean Factory
340
newLocationList
352
logician.invoke(LocationList)
351
Publish new LocationList
322
320
342
logician
GetLogician(logician)
341
Logician Facade
logicTypes
332
GetLogicianTypes()
331
Aggregated LocXML Information
321
20
Logic Descriptions
330
Location Aggregator
LocXML
LocXML
LocXML
Adapter Servlets
310
Location Adapter 1
301
Location Adapter 2
302
HTML
XML
Location Sources
300
Location Source 1
101
Location Source 2
102
Location Source 3
103

FIG. 3

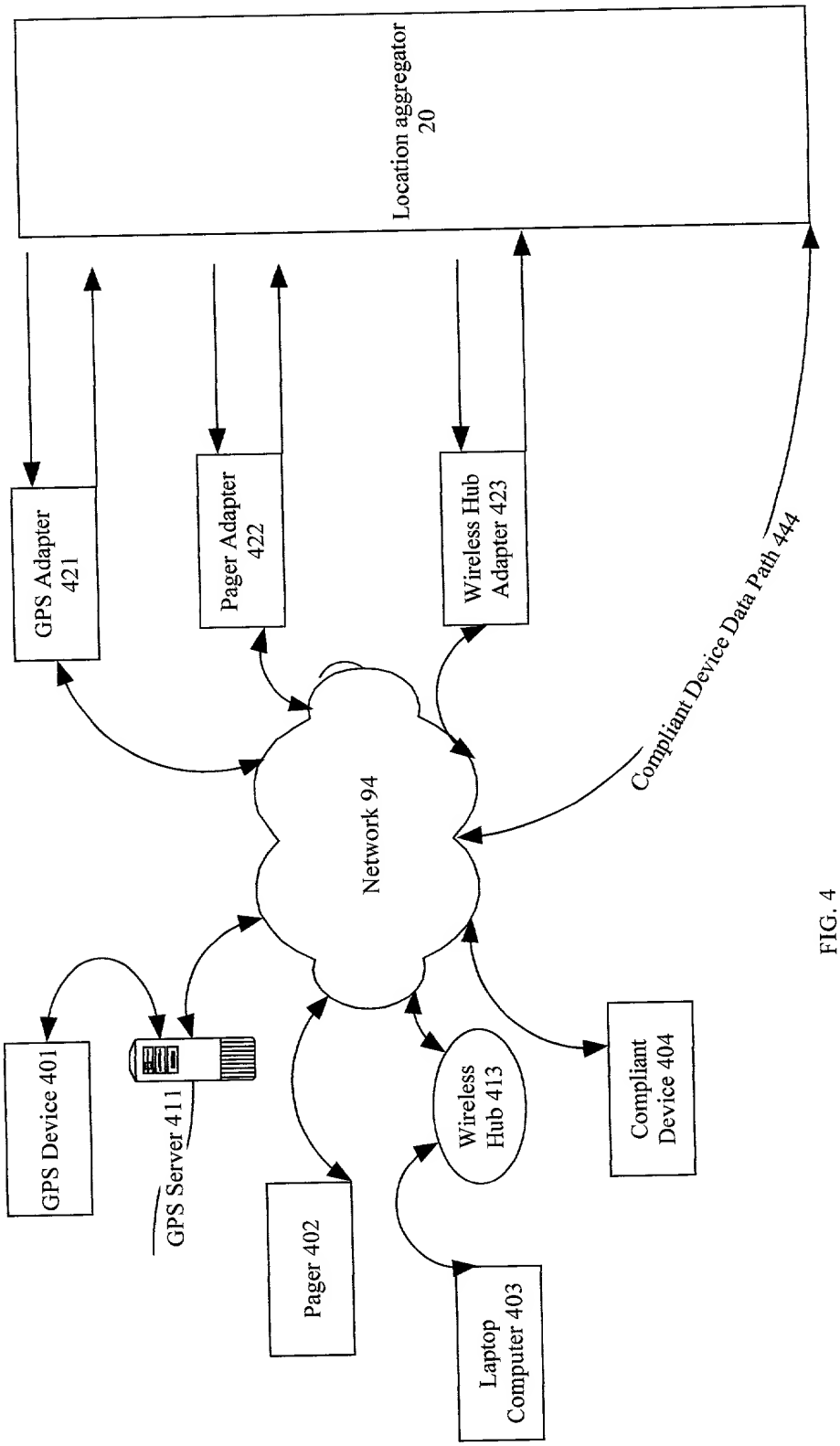
Location aggregator
20
GPS Adapter
421
Pager Adapter
422
Wireless Hub
Adapter 423
Compliant Device Data Path 444
Network 94
GPS Device 401
GPS Server 411
Pager 402
Wireless
Hub 413
Compliant
Device 404
Laptop
Computer 403

FIG. 4

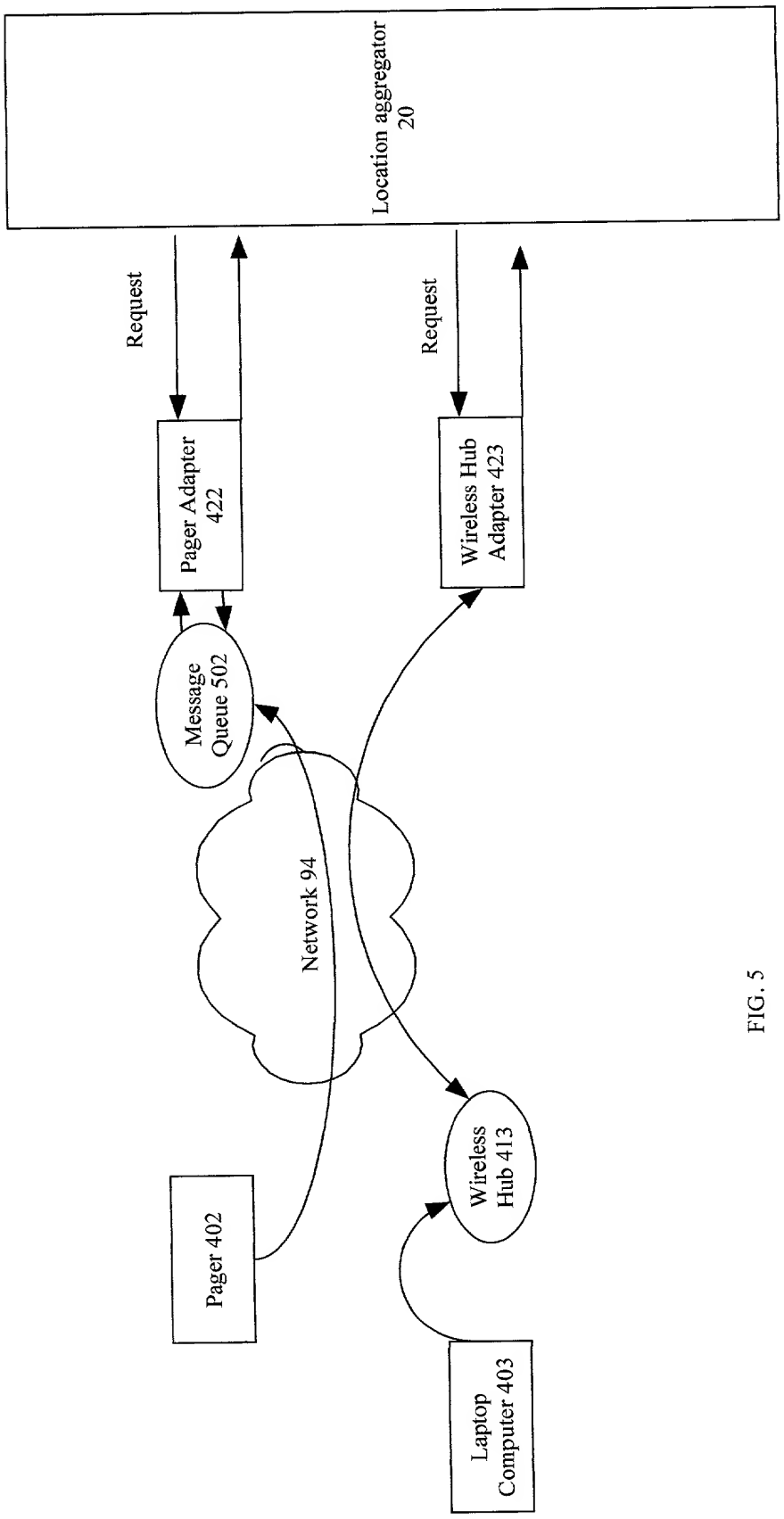
Location aggregator
20
Request
Request
Pager Adapter
422
Wireless Hub
Adapter 423
Message
Queue 502
Network 94
Pager 402
Wireless
Hub 413
Laptop
Computer 403

FIG. 5

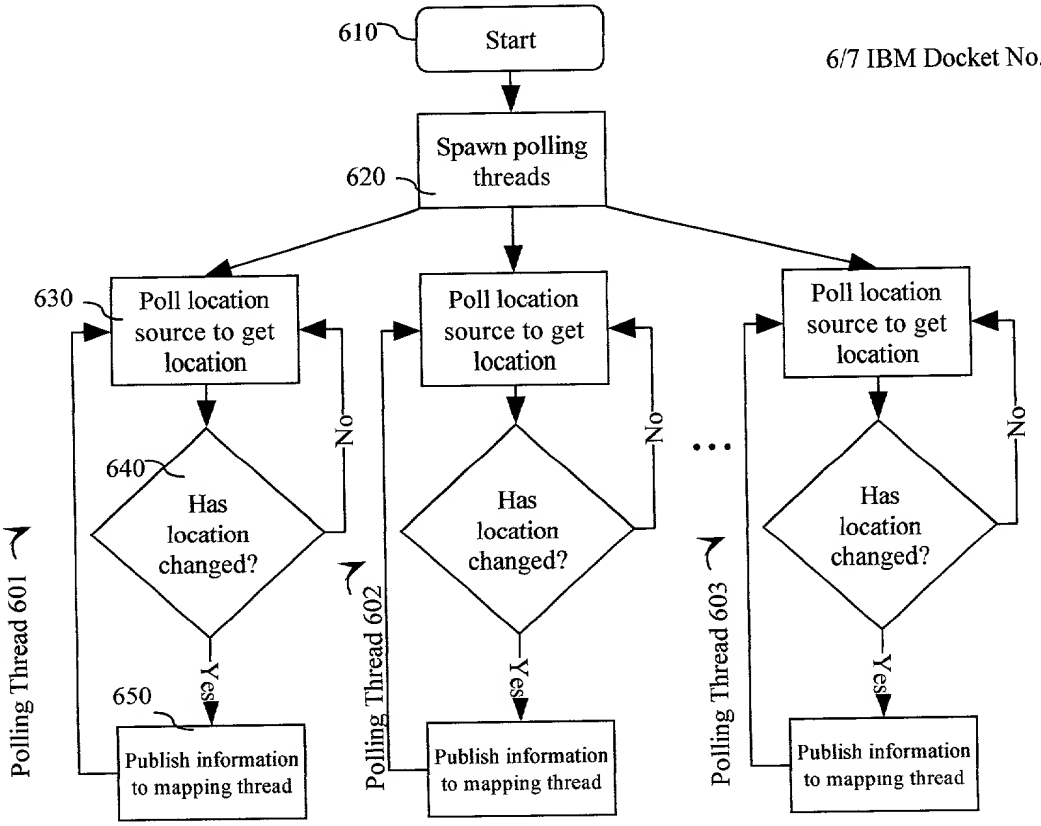
610
Start
Spawn polling threads
620
630
Poll location source to get location
640
Has location changed?
No
Yes
650
Publish information to mapping thread
Polling Thread 601
Polling Thread 602
Polling Thread 603

FIG. 6

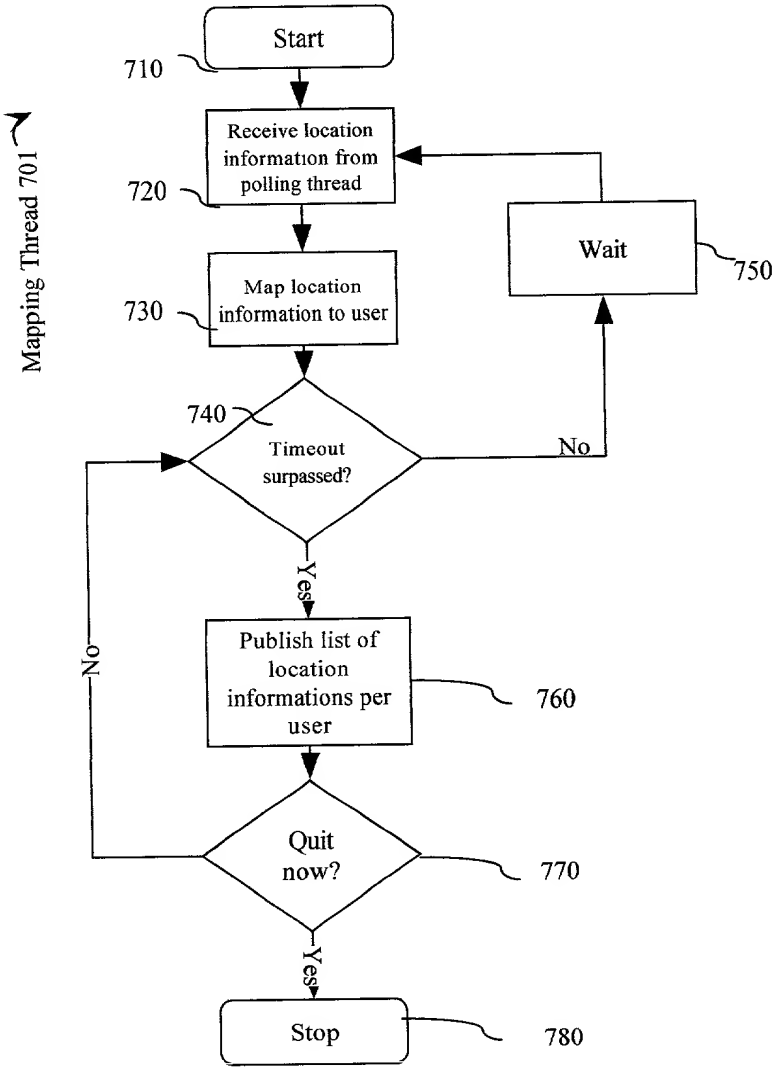
Start
710
Mapping Thread 701
Receive location information from polling thread
720
Map location information to user
730
740
Timeout surpassed?
No
Yes
Wait
750
Publish list of location informations per user
760
Quit now?
770
Yes
No
Stop
780

FIG. 7

FIG. 8

811
- <LocationInformation>
- <MobileDevice TrackID="1234567890" RequestTime="20000626115751+-0800" ErrorCode="0">
- <Geographic Velocity="0" PositionTime="20000626115751+-0800">
- <GeodeticDatum>
- <WGS-84>
<LatLong PositionFormat="IDMS0" Latitude="N374820" Longitude="W1222738" />
</WGS-84>
</GeodeticDatum>
<HeightDatum HeightFormat="meters" HeightValue="500" />
<Region RadiusFormat="meters" InnerRadius="0" OuterRadius="100" StartAngle="0" StopAngle="360"
LevelOfConfidence="100" />
</Geographic>
<TowerID PositionTime="20000626115751+-0800" Name="95110" Type="ZIP" />
</MobileDevice>
</LocationInformation>
832
833
871
872